Asthma Alternating with Psychiatric Symptomatology

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• A group of cases and review of the literature is presented documenting the interesting clinical phenomenon of an inverse temporal relationship between asthmatic symptoms and clinical psychiatric symptoms in some patients. It is suggested that physicians treating asthmatic patients should be prepared to handle potential psychiatric complications that may be concomitants of the successful medical management of patients with asthma.

ALMOST ALL PATIENTS in whom clinical bronchial asthma develops show an allergic diathesis, and there is little question that allergens, especially pollens, can precipitate acute asthmatic attacks in susceptible persons. The role of psychiatric variables in the etiology of asthma has been the focus of many studies over the past several years. There have been many well documented case reports and experimental studies showing that emotional factors can precipitate various types of acute allergic reactions, including acute asthmatic attacks. Probably the most well known example of the latter is that cited by Osler[14] of the patient who was allergic to roses and developed severe symptoms in the consultation room on sighting an artificial rose.

One line of evidence that has been followed to document psychiatric influences in asthma has been the phenomenon of alternation of asthma and various clinical psychopathological disorders. This finding, in addition to several studies indicating the statistically significant below average incidence of asthma in psychiatric patients in hospital, has led to numerous hypotheses. Among these are (1) Asthmatic persons have a "psychotic core"[1]; (2) physiologic alterations associated with psychosis change autonomic (parasympathetic) reactivity[5]; (3) something about the lower incidence of asthma in psychotic persons indicates a biochemical or physiologic fact about psychosis[17]; (4) asthma is part of the defense apparatus of a person such that, when it is removed, a decompensation is possible[2]; (5) asthma is an "equivalent" of a distressing affect or conflict.[4]

Rather than bringing evidence to bear in favor of any of these difficult-to-test hypotheses, we shall report cases reaffirming the existence of this alternation phenomenon and review recent work having to do with it, regardless of the theoretical context within which it was reported.

REPORTS OF CASES

CASE 1. The patient was a 17-year-old hebephrenic schizophrenic boy who had been in intensive psychotherapy for two years. His psychosis began at the age of 13 and gradually progressed, finally culminating in admittance to hospital, at the age of 15, in a severely regressed state—hallucinary, delusional, intermittently catatonic and incontinent.

He had a history of asthma beginning at the age of four and coinciding in time with the beginning of severe conflict in his home. Until the age of 13 and the beginning of psychosis, the patient had several attacks of asthma a year, lasting several hours to three days. He frequently required "injections" to terminate these episodes and upon one occasion was put in hospital. With the onset of his social withdrawal, peculiar ideation, school problems and preoccupations with abstract and fanciful material, the asthmatic episodes ceased. After he had been in hospital one month, receiving intensive psychotherapy and phenothiazine medication, the psychotic process remitted, and when it did the nighttime wheezing returned. It was controlled with oral medication. Since that time, he has had periodic psychological regressions. These occur about every ten weeks and last two to three weeks. The first four times these regressions occurred, the symptoms of asthma disappeared and in each case the psychiatric remission was heralded by the return of the patient's wheezing. During the 12 months before the present report, the psychiatric symptoms diminished decidedly in severity and the asthma did not recur.

CASE 2. An 18-year-old girl undergoing psychiatric treatment first had breathing difficulties at the age of 18 months, and after several years was diagnosed as having bronchial asthma. Up to the age of 18 the longest symptom-free period in her life had been a four-month period when she was living at a residential home for asthmatic children in the Rocky Mountain states. During the first six

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months of her psychotherapy she continued to have severe asthmatic attacks, requiring the usual emergency room regimen and occasional overnight stays in hospital. She played a somewhat passive role in her therapy during this time, denying any psychological symptoms such as anxiety or depression. She did not show any signs of either anxiety or depression, and is described by her mother during this period (as well as for most of her life preceding this period) as a very quiet, obedient, hard-working person who never expressed any anger or any other emotion so far as she could tell.

After this initial period of her psychiatric therapy, she stopped having asthmatic attacks and in the two-year period following remained free of attacks except for one severe episode around Christmas. Her mother reported that she had become angrily assertive, seemed to be moody at times and at other times displayed a great deal of restlessness. At the time of this report the therapist noted periods of depression and anxiety. During the previously mentioned episode of wheezing at Christmas time, she was again stoic, passive and agreeable.

CASE 3. A 25-year-old psychology graduate student of very superior intelligence sought psychiatric treatment because of fears of homosexuality that had become apparent to him in his work. He was exceedingly psychologically sophisticated, and spent the early part of his therapy attempting to duel with his therapist on an intellectual level. His defense of intellectualization and rationalization kept him from having to deal with numerous unconscious conflicts that were disturbing him. After several months, the therapist noted that at last the patient seemed to be developing insight and to be looking at his own behavior patterns in a meaningful way. At this point, the therapist noted that the patient seemed to be having some respiratory difficulty, and the patient then volunteered that he was wheezing for the first time since his father died when he was 13 years of age. He then reported that he had been troubled with asthmatic attacks from a very young age, up until the age of 13 when he first became self-supporting following his father's death from cancer. It was subsequently noted by the therapist that when the patient seemed to be closest during the therapy hour to seeing some of the meanings of his conflicts, he would often begin wheezing.

CASE 4. A 25-year-old married man consulted a psychiatrist because of feelings of severe depression, secondarily indicating that he was habituated to a narcotic. During the course of his brief, dynamically oriented psychotherapy, he was able to completely cease using narcotics. His feelings of depression began to leave, and he then reported that the depth of his depression had been unknown to the therapist —that he had come close to suicide shortly after beginning treatment. He further reported that he had first started feeling depressed when as an adolescent he had decided to be "strong" and "unemotional" and had impulsively left home following an argument with his parents. He took a body-building course and felt that he became capable of defending himself against anyone and everyone.

During the course of his therapy, as his depression lifted, the patient reported that he had noticed the recurrence of asthma which he had had as a child. Further questioning revealed that he had been bothered with some asthma almost nightly as a child and adolescent, and that his asthmatic attacks ceased completely at the time he decided to be "strong" and impulsively left home.

COMMENT

One of the first reports of this phenomenon in the literature was by Saxl[16] in 1933. He reported a case of asthma alternating with manic depressive psychosis. Oberndorf[13] two years later reported a similar case. Kesselbaum[8] in 1936 reported ten patients with "dementia praecox" who had long histories of asthma which disappeared with the onset of mental disease. Gillespie[6] reported cases of anxiety attacks associated with phobic concerns which alternated with asthmatic symptomatology. MacInnis[11] in 1936 made a statistical survey of the incidence of asthma in psychotic patients in hospital. Among 7,000 patients in two mental hospitals over a five-year period, there were only five cases of asthma. Three patients who had life-long asthma were relieved of this disease during their psychotic episodes, and when psychosis remitted the asthmatic symptoms recurred. Leavitt[10] in a study of 11,647 patients with functional psychosis found only ten cases of asthma, an incidence of 0.08 per cent. This was compared with an incidence of asthma in the general population of from 10 to 20 per cent. McAllister and Hecker,[12] studying the incidence of several kinds of allergic reactions among psychotic as compared with normal populations, confirmed Leavitt's findings.

Appel and Rosen[1] in 1950 found that asthmatic patients treated with corticotropin (ACTH) or corticoids might become psychotic upon the remission of asthma. Of course, since that time, the influence of corticoid substances alone in producing or precipitating psychotic reactions has become well known. Funkenstein[5] studied some aspects of autonomic function in patients with alternating psychosis and asthma. Using mecholyl and epinephrine injections and measuring various autonomic variables, including blood pressure and heart rate, he

found that when patients were asthmatic they had pronounced parasympathetic sensitivity (easy induction of prolonged asthmatic attacks and sharp declines in blood pressure with mecholyl administration) and that this was reversed when the patient was psychotic. This was felt by the author to indicate a shift in autonomic balance which he believed to be associated with significant changes in psychic state. In a careful study of 32 psychotic patients, Sabbath and Luce[15] found no selective distribution of asthma among diagnostic categories. Studying the phenomenon of alternation, however, they found that asthma and psychosis could be coexistent in paranoid reactions, but in the rest of the patients the degree of asthmatic symptomatology varied inversely with the level of psychosis. More recently Knapp and coworkers[9] studied the personality variations with asthma and found that the reciprocal relationship between psychiatric symptoms and asthma appears to be a less clear-cut phenomenon. Some kinds of personality configurations had superimposed psychopathologic elements and asthma.

The most recent studies of this entity have shown that not only may frank psychosis alternate with asthma in some patients, but that more subtle, neurotic symptoms will become manifest in association with remission of asthma. Depression and crying,[3] open expression of anger[18] and impulsive destructive acts[7] have all been reported in asthmatic patients, occurring only during periods of remission of asthmatic symptoms.

The cases presented here cover a broad range of psychopathologic states as well as severity of asthma and serve to document that the inverse relationship between asthma and clinical psychiatric symptoms can be of wide variety and great degree. It would appear that physicians treating asthmatic patients should be alerted to and prepared to handle potential psychiatric complications that may appear in association with the medical management of a patient with asthma. In addition, in any "spontaneous" remission of chronic asthma, it would be wise to determine whether or not disabling psychiatric symptoms have taken the place of the wheezing.

If the physician is alert to the above possibilities, his own clinical judgment will help him decide whether the patient needs listening and support or psychiatric referral.

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